

CLAIMS:

1. A resorbable extracellular matrix for reconstruction of cartilage tissue, said matrix comprising a purified collagen II derived from natural cartilage tissue from which non-collagen proteins have been removed, wherein said matrix comprises fibres of native collagen II which are physiologically acceptable for implant into a mammalian body, said matrix having a pore size within a range of about 50 - 400  $\mu\text{m}$ .

2. A matrix as claimed in claim 1 having a pore size within a range of about 70 - 120  $\mu\text{m}$ .

3. A matrix as claimed in claim 1 containing at least one glycosaminoglycan (GAG) comprising about 1 - 15% by weight of said matrix.

4. A matrix as claimed in claim 3 wherein said at least GAG comprises about 2 - 3% by weight of said matrix.

5. A matrix as claimed in claim 1 having a density of about 0.18 - 0.22  $\text{g}/\text{m}^3$ .

6. A matrix as claimed in claim 1 wherein said matrix includes a material selected from the group consisting of at least one glycosaminoglycan (GAG), chondronectin, anchorin II, cartilage inducing factor (CIF), insulin-like growth factor (IGF), transforming growth factor  $\beta$  ( $\text{TGF}\beta$ ) and a mixture thereof.

7. The matrix of claim 1 wherein said GAG is selected from the group consisting of chondroitin sulphate, keratan sulphate, dermatan sulphate, hyaluronic acid, and a mixture thereof.

8. A matrix as claimed in claim 1, wherein said natural cartilage tissue is subjected to defatting.

9. A matrix as claimed in claim 1 which is derived from hyaline cartilage from pig.

10. A scaffold implant for promoting cartilage regeneration comprising the matrix of claim 1, said implant having a thickness of about 0.2 - 2 cm.

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11. The implant of claim 10 having a thickness of about 0.4 - 1 cm.

12. The implant of claim 10, wherein said matrix is a carrier of a material selected from the group consisting of mesenchymal stem cells and a cartilage cell growth-promoting nucleic acid sequence.

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